# A New Nematopoid Species of *Xyris* (Xyridaceae) from Guyana[1]

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ABSTRACT. A new species of *Xyris* has been found in the wet savanna lands of the Rupununi District, Guyana. *Xyris dilatatiscapa* is described, illustrated, and discussed as to its relationships with other *Xyris*.

**Xyris dilatatiscapa** Kral & Jansen-Jacobs, sp. nov. TYPE: Guyana. Rupununi District between Dadanawa and Mountainpoint, wet savanna, 100–150 m, 2°55′N, 59°40′W, 3 Oct. 1992, *M. J. Jansen-Jacobs, B. J. H. ter Welle, H. J. M. Sipman & V. James 2734* (holotype, U; isotypes, BRG, VDB). Figure 1.

*Xyris paraensis* Poeppig ex Kunth et *X. savanensis* Miquel aliquot similis, vaginis foliorum ciliatis, scapis supra medio aut apicem versus abrupte dilatatis et papillosis, sepalis lateralibus integris, laminis staminodiorum imberbibus, obcordatis, tumidis, differt.

Plant low, slender, solitary to caespitose, annual or perennial (4–)6–10(–14) cm high, stems contracted. Roots slender. Principal foliage leaves erect to spreading, (1.5–)2–3 cm long, somewhat twisted, longer than scape sheaths to slightly shorter; blades narrowly linear, ca. 0.5 mm wide, fleshy, slightly compressed, involute, green, obtuse, lunate in cross section, transversely undulate-rugose, margin and midzone abaxially deep green, thickened, with pale green intervals; sheaths pale green, few-costate, costae green, papillose, gradually narrowing to blades, gradually dilating proximally, borders scarious, long-ciliate. Scape sheaths lax, mostly open, twisted, rugulose, short-bladed, obtuse. Scapes filiform, subterete, pale red-brown, ca. 0.2 mm thick, abruptly dilating above the middle to ca. 0.5 mm, dark green, longitudinally costate, transversely rugose-scabridulous or rugulose-papillate (as in leaf blades). Spikes ellipsoid, 4–5 mm long, few-flowered, fertile bracts loosely spirally imbricate, convex, thin, with scarious, entire, pale brown borders, obovate or broadly elliptic, 3.5–4 mm long, broadly acute, with narrowly ovate to triangular dorsal areas; sterile bracts mostly 4, subdecussate, ovate, 1.5–1.7 mm long, slightly shorter than the fertile ones, with dorsal areas narrowly lanceolate, green. Lateral sepals free, inequilateral, elliptic, 3–3.5 mm long, acute, curved; carinal keel firm, narrow, entire. Petal blades elliptic, ca. 3 mm long, yellow, apically low-serrate. Anthers broadly oblong, ca. 0.5 mm long, deeply bifid and sagittate; filaments thickened, ca. 0.5 mm long. Staminodial blades obcordate, ca. 1 mm long, tumid, beardless. Capsule ellipsoid, ca. 2.5 mm long, placentation central, placenta trifid apically. Seeds numerous, cylindro-ellipsoid, 0.6–0.7 mm long, pale red-brown, longitudinally finely lined, translucent.

*Distribution.* Known only from the type locality.

Application of prior treatments of *Xyris* such as those by Idrobo (1954), Maguire and Smith (1964), Smith and Downs (1968), and Kral (1988, 1994) provide no sure lead to a close relative of this new taxon. There are, as the description shows, superficial resemblances to *X. paraensis* Poeppig ex Kunth and *X. savanensis* Miquel. However, the sheath edges of *X. dilatatiscapa* are ciliate, rather than entire as in those species; its leaf blades are distinctly thickened with incrassate-papillate, involute edges, unlike those species; its scapes are abruptly dilated above midscape, there also densely papillose in contrast to the more slender, glabrous lower scape (this feature is, so far as we know, a distinction held by no other *Xyris*); its lateral sepals have entire keels in contrast to the more strongly curved, ciliate keels of *X. savanensis* and *X. paraensis*; its staminodial blades are bifid and beardless as is true for *X. savanensis*, but are obcordate and tumid (rather than deeply cleft and flattened). Distinctive also is the placental situation, which in

[1] Studies on the flora of the Guianas 86.

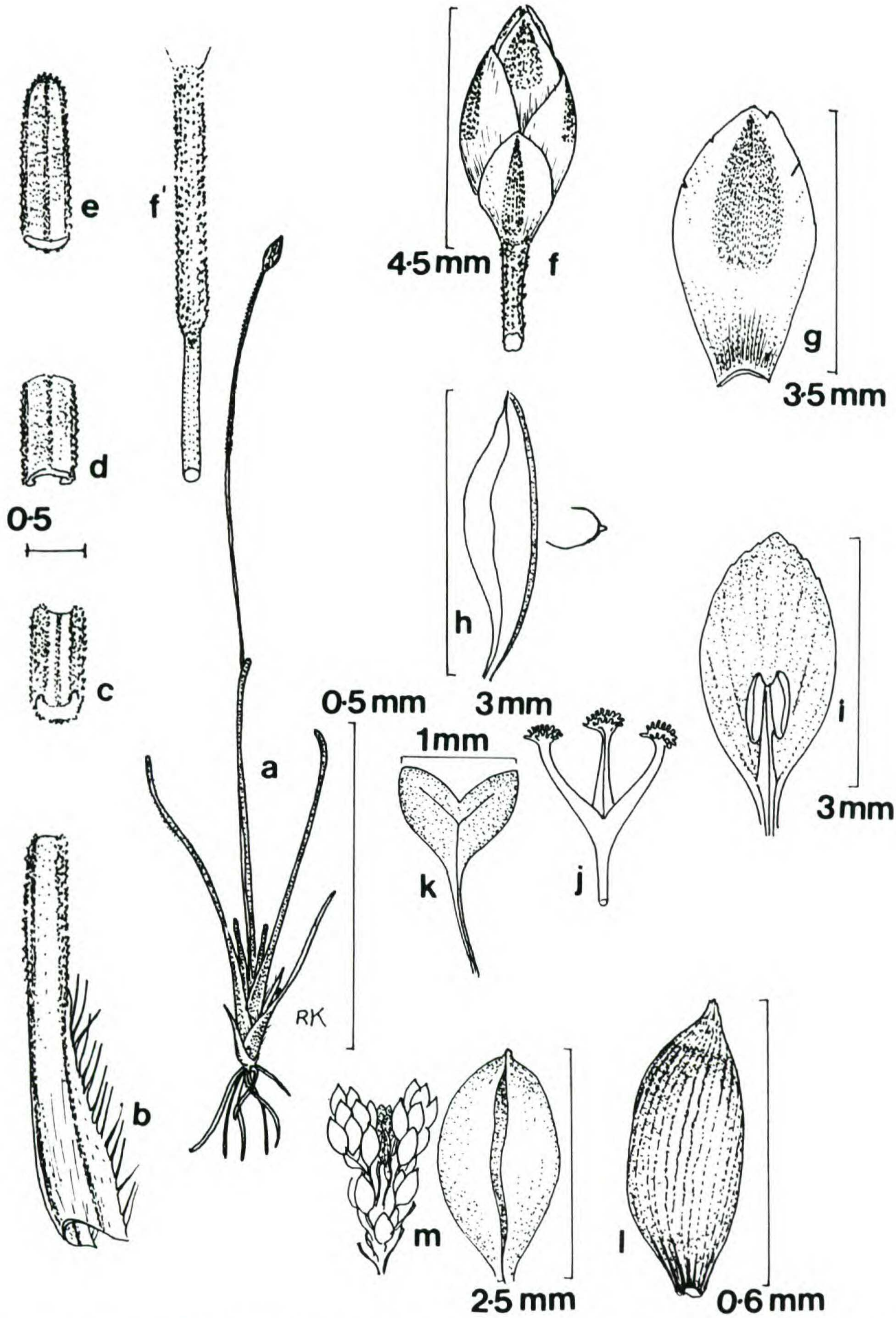


Figure 1. *Xyris dilatatiscapa* Kral & Jansen-Jacobs (from *Jansen-Jacobs et al. 2734*). —a. Habit sketch. —b. Leaf base. —c. Leaf blade sector, adaxial. —d. Leaf blade sector, abaxial. —e. Leaf apex, adaxial (left). f¹. Scape apex. —f. Spike. —g. Fertile bract. —h. Lateral sepal. —i. Petal blade, stamen. —j. Stylar apex. —k. Staminodial blade. —l. Seed. —m. Placenta (left); capsule (right).

this new species is central and columellar below the middle, three-branched distally and with the numerous seeds on comparatively short funicles, rather than basal with elongate funicles.

Literature Cited

Idrobo, J. M. 1954. Xyridaceae de Colombia. Caldasia 6(29): 184–260.

Kral, R. 1988. The genus *Xyris* (Xyridaceae) in Venezuela and contiguous northern South America. Ann. Missouri Bot. Gard. 75: 522–722.

———. 1994. Xyridaceae. *In:* Flora of the Guianas, Ser. A: Phanerogams, fasc. 15. Koeltz Scientific Books, Königstein, Germany.

Maguire, B. & L. B. Smith. 1964. Xyridaceae. *In:* B. Maguire, J. J. Wurdack & Collaborators, The Botany of the Guayana Highland—Part V. Mem. New York Bot. Gard. 10(5): 7–37.

Smith, L. B. & R. J. Downs. 1968. Xyridaceae. *In:* F. C. Hoehne, Fl. Brasilica 9(2): 1–215.